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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/423,243

Applicant(s)

YANAGAWA, YOSHIFUMI

Examiner

Johnny Ma

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-19 and 30-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/27/00.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/18/2004 have been fully considered but they are not persuasive.

In regard to claims 1, 2 and 3, Applicant argues "Humbleman does not disclose or suggest that the controller reads the display component and control code from the device."

However, the examiner respectfully disagrees. As cited in the previous Office Action, the Humpleman et al. reference discloses "...control may be implemented by transfer of a graphical control object (GCO), which preferably resides in the server [home device], from the server for rendering on the client [DTV], to make the GUI" (Humbleman et al. 8:32-35) and the "...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device..." (Humbleman et al. 7:18-22). The Humpleman et al. reference further discloses "[t]he browser based DTV 102 (acting as a client), receives and interprets the HTML files associated with the home devices (acting as servers) and graphically displays the respective control and command information on its viewable display" (Humbleman et al. 7:2-7). Thus the examiner respectfully submits that the Humpleman reference discloses "the controller reads the display component and control code from the device" wherein the controller [DTV] receives display component and control codes from the home devices. Also note that the receiving of such data satisfies the claimed "reads" wherein "read" is defined as "to receive or take in the sense of (as letters of symbols)" (see Merriam-Webster's Collegiate Dictionary, 10th Ed.).

Applicant further argues “Humbleman fails to disclose or suggest that the browser-based DTV transmits a control code corresponding to the display component.” Applicant also asserts that “Humbleman does not disclose or suggest utilizing the first selected device to transmit a control code to the second device.” The examiner respectfully disagrees. As noted in the previous Office Action, the Humpleman et al. reference discloses “...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humbleman et al. 19:3-8) wherein the home pages provides specific control and command information for respective devices (Humbleman 7:13-15), also see Figure 10 illustrating an example session page. The specific control and command information satisfy the claimed control code in that they provide a set of instructions to control a home device. Note that “code” is defined as “a set of instructions for a computer” (see Merriam-Webster’s Collegiate Dictionary, 10th Ed.). Thus the Humpleman et al. reference discloses the command and control of the respective home devices is accomplished via control codes corresponding to the display component.

In regard to Applicant’s assertion regarding the inherency of the control code. Note the Humpleman et al. reference discloses “...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humbleman et al. 19:3-8) wherein the home pages provides specific control and command information for respective devices (Humbleman 7:13-15). Further note that “code” is defined as “a set of instructions for a computer” (see Merriam-Webster’s Collegiate Dictionary, 10th Ed.). The Humpleman et al. reference thus discloses controlling home devices remotely via the controller. The commanding and controlling of the respective

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devices via remote controlling by the controller comprises a set of instructions for a computer [home device]. Thus control code is inherent to the commanding/controlling of the Humpleman et al. home devices.

Regarding claim 18, Applicant asserts “[t]he Examiner asserts that Humpleman discloses displaying a variation of image files representing different device states. However, in contrast to the conclusion set forth in the pending rejection, Humpleman specifically discloses that each home device connected to a home network contains an ICON image file, where the ICON image file is a file containing an image that represents the particular type of the corresponding home device (see, col. 10, lines 20-24). As such, it would appear that the foregoing elements are features of the alleged device, rather than characteristics of the controller, as recited by claim 1[8].” The examiner notes that claim 18 reads “said controller reads said operation picture data from said device and displays an operation picture prepared by using said operation picture data by switching between operation pictures according to the operation of the user,” thus the claims appears to be directed to characteristics of the device, not the controller. Consequently, , it is noted that the features upon which applicant relies (i.e., features of the characteristics of the controller) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, the examiner respectfully submits that the Humpleman et al. reference does disclose displaying a variation of image files representing different device states wherein “[i]n certain embodiments, several variations of the ICON image file reside on a respective home device, with each ICON variation representing a particular state of the home device. For example, for a DVCR, the ICON image

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files may contain images of a DVCR playing, rewinding, media inserted, media absent, etc.” (Humbleman et al. 10:30-35). As discussed in the previous Office Action, the claimed “said controller reads said operation picture data from said device and displays an operation picture prepared by using said operation picture data by switching between operation pictures according to the operation of the user” is met by the display of variations of image files representing different device states (Humbleman et al. 10:20-54). It is noted that the various image files are stored on the respective home devices (Humbleman et al. 10:30-35) and such states are displayed on the DTV via session manager (Humbleman et al. 7:18-22). Furthermore, “...each ICON variation representing a particular state of the home device. For example, for DVCR, the ICON image files may contain images of a DVCR playing, rewinding, media inserted, media absent, etc.” (Humbleman et al. 10:30-35). As disclosed in the DVCR example, states in include playing and rewinding, functions of the DVCR that are controller by user operation. Thus when a user directs the DVCR to switch states, the displayed state switches between operation pictures according to a user’s operation.

Regarding claim 19, Applicant argues “[t]he Examiner asserts that each home device supplies its own GUI through its own HTML files to the browser-based DTV 012, where each home device contains an ICON image file for displaying variation of images files representing device states. As such, it would appear that the foregoing elements are features of the alleged device, rather than characteristics of the controller, as recited by claim 19.” The examiner notes that claim 19 requires “reading a plurality of operation picture data from the device provided with a user interface and acting as an object to be controller.” The examiner respectfully submits that the claimed limitations it appear to be directed to characteristics of the device as opposed to

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that of the controller, as asserted by the Applicant. Consequently, it is noted that the features upon which applicant relies (i.e., features of the characteristics of the controller) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant further argues “nowhere does Humpleman disclose or suggest producing a selection picture for selecting the plurality of operation screens from the operation picture data of the device.” However, as discussed in the previous Office Action, the claimed “producing a selection picture for selecting said plurality of operation screens from said operation picture data” is met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humpleman et al. 7:18-22, also see Figure 11). Figure 11 illustrates a selection picture for selecting the plurality of operations screens (see Dads TV GUI and Jims DVD GUI), wherein the GUI is provided from the operation picture data (GUI) from the respective home devices.

Regarding claim 16, applicant argues “at a minimum, Iwamura does not disclose or suggest that the device can store data of the display component as the identifying information in the identification information area... Nowhere does Iwamura discuss or even mention that the individual device is capable of storing data of the display component as the identifying information. Instead, Iwamura only utilizing the connection map for storing the data of the display component.” However, the examiner respectfully disagrees, The rejection of claim 16, in the rejection of claim 16 as discussed as follows: “As to claim 16, note the Sony reference that discloses a device user interface with topology map wherein tasks performed by the devices

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coupled to the serial bus are also controlled and monitored by the user through the graphical use interface of the computer system” (page 4, lines 15-17). The claimed “having an identification information memory area to store identifying information, whereby said device is identified by the user” is met by the storing of connection map or a topology map in external RAM (page 14, lines 4-6) including display components as illustrated in Figures 10 and 11. The claimed “receiving data of a display component, whereby the user identifies designated equipment” is met by “[a]lternatively, the computer system will obtain the image of the device from the memory of the device itself” (page 17, lines 19-20). The claimed “storing data of said display component as said identifying information in said identification information memory area” is also met by the storing of connection map or a topology map in external RAM (page 14, lines 4-6).” Thus the Iwamura reference discloses that the device can store data of the display component as identifying information in the identification information area wherein the display component may be stored on the device, obtained by the computer system and stored in external ram.

Regarding claims 7 and 8, the examiner first notes that the Official Notice statement was not traversed by Applicant is taken as fact. The examiner also notes that the EPG as disclosed in the Humpleman et al. reference, “typically provides a list and schedule of programs that are available for viewing on a particular channel” (Humpleman et al. 22:65-67) wherein the EPG guide may comprise a HTML program guide (Humpleman et al., see column 23) wherein the list of programs are associated with display elements for presentation to a user. Thus the Humpleman et al. reference meets the claimed “program including a display element.” Applicant also argues that the Humpleman et al. reference does not disclose a control code

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(program ID). However, as discussed in the previous Office Action, Humpleman et al. was not relied upon for this teaching, rather the rejection was a combination of Humpleman et al. and that which is well known in the art. Specifically, the Examiner gave Official Notice that it is notoriously well known in the art of electronic program guides to allow a user to select a program listed on such a guide causing the tuner to directly tune to the channel the selected program is currently being broadcasted for the purpose of allowing a user to quickly identify a program of interest and providing a convenient means for tuning to that program that does not require a user to exit a guide and tune to such a channel manually. Such direct tuning satisfies the claimed program ID wherein the selection of a program in the EPG results in the identification of the program channel result in tuning of the selected program channel.

Regarding claim 17, Applicant argues “[t]he Examiner asserts that Iwamura discloses storing a connection map or a topology map in the external RAM. However, in contrast to the conclusion set forth in the pending rejection, nowhere does Iwamura disclose or suggest storing a flag to identify the display component of a plurality of kinds selected by the user, or receiving the flag of the display component selected by the user, as recited by claim 17.” In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within

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the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one of ordinary skill in the art for the purpose of providing user customization and to allow a user to select pictorial representations that may aid in easy identification or recognition of the represented object.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 9-15, 18, 19, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Humpleman et al. (US 6,603,488 B2).

As to claim 1, note the Humpleman et al. reference discloses a browser based command and control home network. The claimed “controller having a user interface; and a device acting

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as an object to be controlled, with at least said controller and device included in said two or more of equipment” is met by “...the DTV 102 provides the human interface for the home network 100 by employing a browser technology to allow users to control and command the home devices over the home network 100” (Humpleman et al. 6:15-18, also see Figure 1). The claimed “wherein said device has at least one or more display components, each of which configures an operation picture for operating said device, and also has a control code corresponding to said display component” is met by “...control may be implemented by transfer of a graphical control object (GCO), which preferably resides in the server [home device], from the server for rendering on the client [DTV], to make the GUI” (Humpleman et al. 8:32-35) where the control code corresponding to the display component is inherent to the controlling of the disclosed home devices. The claimed “said controller reads said display component and control code from said device and display said read display component on a display screen” is met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humpleman et al. 7:18-22). The claimed “said controller transmits the control code corresponding to said display component and also operation information of said user to said device when the user operates said display component on said display screen; and said device executes a function indicated by said display component according to said transmitted control code and user’s operation information” is met by “...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humpleman et al. 19:3-8).

As to claim 2, note the Humpleman et al. reference discloses a browser based command and control home network. The claimed “controller having a user interface; and a device acting as an object to be controlled, with at least said controller and device included in said two or more of equipment” is met by “...the DTV 102 provides the human interface for the home network 100 by employing a browser technology to allow users to control and command the home devices over the home network 100” (Humpleman et al. 6:15-18, also see Figure 1). The claimed “wherein said device has at least one or more display components, each of which configures an operation picture for operating said device” is met by “...control may be implemented by transfer of a graphical control object (GCO), which preferably resides in the server [home device], from the server for rendering on the client [DTV], to make the GUI” (Humpleman et al. 8:32-35) where the control code corresponding to the display component is inherent to the controlling of the disclosed home devices. The claimed “and also has a plurality of control codes corresponding to said display component” is met by “[a] macro is a sequence of commands that is saved in memory on a home device and which can be accessed and executed by a user...as if the user actually selected a particular button or performed a particular action from within a HTML page contained on the respective home device” (Humpleman et al. 21:36-41). The claimed “said controller reads said display component and control code from said device and display said read display component on a display screen” is met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humpleman et al. 7:18-22). The claimed “said controller transmits a few control codes out of said plurality of control codes corresponding to said display component and also operation

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information of said user to said device when the user operates said display component on said display screen; and said device executes a function indicated by said display component according to said transmitted control code and user's operation information" is met by "...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humpleman et al. 19:3-8).

As to claim 3, note the Humpleman et al. reference discloses a browser based command and control home network. The claimed "controller having a user interface; and a device acting as an object to be controlled, with at least said controller and device included in said two or more of equipment" is met by "...the DTV 102 provides the human interface for the home network 100 by employing a browser technology to allow users to control and command the home devices over the home network 100" (Humpleman et al. 6:15-18, also see Figure 1). The claimed "wherein said device has at least one or more display components, each of which configures an operation picture for operating said device," is met by "...control may be implemented by transfer of a graphical control object (GCO), which preferably resides in the server [home device], from the server for rendering on the client [DTV], to make the GUI" (Humpleman et al. 8:32-35) where the control code corresponding to the display component is inherent to the controlling of the disclosed home devices. The claimed "and also has a plurality of control codes corresponding to said display component" is met by "[a] macro is a sequence of commands that is saved in memory on a home device and which can be accessed and executed by a user...as if the user actually selected a particular button or performed a particular action from within a HTML page contained on the respective home device" (Humpleman et al. 21:36-

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41). The claimed “said controller reads said display component and control code from said device and displays said read display component on a display screen” is met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humbleman et al. 7:18-22). The claimed “said controller transmits a few control codes out of said plurality of control codes corresponding to said display component to said device when the user operates said display component on said display screen; and said device executes a function indicated by said display component according to said transmitted control code” is met by “...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humbleman et al. 19:3-8).

As to claim 4, please see rejections of claim 3.

As to claim 5, the claimed “wherein a display component includes at least one or more of still picture data and/or text data” is met by the display components as illustrated in Figure 11 (Humbleman et al.).

As to claim 6, the claimed “wherein a control code is an identification data of a display component” is met by “...user may now select control options from the home pages of each selected device (e.g., play 1044 and volume 1042 respectively from the DVCR and the DTV home pages) in order to command and control the respective home devices to function in a particular manner” (Humbleman et al. 19:3-8) wherein each displayed function is associated with a control/command to a device.

As to claim 9, the claimed “wherein in case a display component undergoes an alteration a device transmits information on said altered display component to a controller” is met by the display of various icons representing different states of a particular device (Humpleman et al. 10:14-54).

As to claim 10, note the Humpleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humpleman et al.). The claimed “at least one or more display components to configure an operation picture for operating the device; and a control code corresponding to said display component” is met by “...control may be implemented by transfer of a graphical control object (GCO), which preferably resides in the server [home device], from the server for rendering on the client [DTV], to make the GUI” (Humpleman et al. 8:32-35) where the control code corresponding to the display component is inherent to the controlling of the disclosed home devices. The claimed “wherein said device executes the function indicated by said display component according to said control code received via said transmission line and operation information of the user” is met by “...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humpleman et al. 19:3-8).

As to claim 11, note the Humpleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humpleman et al.). The claimed “at least one or more display components to configure an operation picture for operating the device” is met by “...control may be implemented by transfer of a graphical control object (GCO), which preferably resides in the server [home device], from the server for

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rendering on the client [DTV], to make the GUI" (Humbleman et al. 8:32-35) where the control code corresponding to the display component is inherent to the controlling of the disclosed home devices. The claimed "and a plurality of control codes corresponding to said display component" is met by "[a] macro is a sequence of commands that is saved in memory on a home device and which can be accessed and executed by a user...as if the user actually selected a particular button or performed a particular action from within a HTML page contained on the respective home device" (Humbleman et al. 21:36-41). The claimed "wherein said device receives a few control codes out of said plurality of control codes and operation information of the user via said transmission line and executes the function indicated by the display component" is met by "...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humbleman et al. 19:3-8).

As to claim 12, note the Humbleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humbleman et al.). The claimed "at least one or more display components to configure an operation picture for operating the device" is met by "...control may be implemented by transfer of a graphical control object (GCO), which preferably resides in the server [home device], from the server for rendering on the client [DTV], to make the GUI" (Humbleman et al. 8:32-35) where the control code corresponding to the display component is inherent to the controlling of the disclosed home devices. The claimed "and a plurality of control codes corresponding to said display component" is met by "[a] macro is a sequence of commands that is saved in memory on a home device and which can be accessed and executed by a user...as if the user actually selected a

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particular button or performed a particular action from within a HTML page contained on the respective home device” (Humpleman et al. 21:36-41). The claimed “wherein said device receives a few control codes out of said plurality of control codes via said transmission line and executes the function indicated by said display component” is met by “...user may now select control options from the home pages of each selected device...in order to command and control the respective home devices to function in a particular manner (Humpleman et al. 19:3-8).

As to claim 13, note the Humpleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humpleman et al.). The claimed “reading a display component to configure an operation picture of a device and a control code corresponding to said display component from said device provided with a user interface and acting as an object to be controlled; displaying said display component on display screen;” is met by is met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humpleman et al. 7:18-22). The claimed “and transmitting a control code corresponding to said display component and operation information of the user when said user operates said display component on said display screen” is met by “...session manager...generates a session page that provides an interface which allows users to command and control the home devices that are connected to the home network in order to perform various functions and/or services” (Humpleman et al. 14:35-40), where a control code is inherent to the controlling of said devices.

As to claim 14, note the Humpleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humpleman

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et al.). The claimed “reading at least one or more display components to configure an operation screen of a device and a plurality of control codes corresponding to said display component from said device provided with a user interface and acting as an object to be controller; displaying said display component on a display screen” are met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humpleman et al. 7:18-22) wherein “[a] macro is a sequence of commands that is saved in memory on a home device and which can be accessed and executed by a user...as if the user actually selected a particular button or performed a particular action from within a HTML page contained on the respective home device” (Humpleman et al. 21:36-41). The claimed “and transmitting a few control codes out of said plurality of control codes corresponding to said display component and operation information of the user when said user operates said display component on said display screen” is met by “...session manager...generates a session page that provides an interface which allows users to command and control the home devices that are connected to the home network in order to perform various functions and/or services” (Humpleman et al. 14:35-40), where control codes are inherent to the controlling of said devices.

As to claim 15, note the Humpleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humpleman et al.). The claimed “reading at least one or more display components to configure an operation screen of a device and a plurality of control codes corresponding to said display component from said device provided with a user interface and acting as an object to be controlled; displaying said display component on a display screen” are met by “...each home device supplies its own

GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humpleman et al. 7:18-22) wherein “[a] macro is a sequence of commands that is saved in memory on a home device and which can be accessed and executed by a user...as if the user actually selected a particular button or performed a particular action from within a HTML page contained on the respective home device” (Humpleman et al. 21:36-41). The claimed “transmitting a few control codes out of said plurality of control codes corresponding to said display component when the user operates said display component on said display screen” is met by “...session manager...generates a session page that provides an interface which allows users to command and control the home devices that are connected to the home network in order to perform various functions and/or services” (Humpleman et al. 14:35-40), where control codes are inherent to the controlling of said devices.

As to claim 18, note the Humpleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humpleman et al.). The claimed “said device has a plurality of operation picture data for controlling the device; and said controller reads said operation picture data from said device and displays an operation picture prepared by using said operation picture data” is met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humpleman et al. 7:18-22, also see Figure 11). The claimed “said controller reads said operation picture data from said device and displays an operation picture prepared by using said operation picture data by switching between operation pictures according to the operation of the

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user” is met by the display of variations of image files representing different device states (Humbleman et al. 10:20-54).

As to claim 19, note the Humbleman et al. reference discloses a browser based command and control home network connected via 1394 serial bus as illustrated in Figure 1 (Humbleman et al.). The claimed “reading a plurality of operation picture data from the device provided with a user interface and acting as an object to be controlled” and “producing a selection picture for selecting said plurality of operation screens from said operation picture data” is met by “...each home device supplies its own GUI through its own HTML files to the browser based DTV 102, the browser based DTV 102 can provide a command and control interface for a home device...” (Humbleman et al. 7:18-22, also see Figure 11). The claimed “displaying said selection picture” is met by the display of variations of image files representing different device states (Humbleman et al. 10:20-54).

As to claim 33, the claimed “wherein said operation information is coded with a plurality of functions, each of said functions is initiated in accordance with a number of times a selection button is pushed or released” is met by the plurality of operation information coded with a plurality of functions as illustrated in Figure 11 (i.e. channel up/down, volume up/down, brightness up/down, power, eject, etc.) wherein the corresponding functions are initiated by clicking the illustrated buttons, wherein multiple clicks results in the incrementing or decrementing of volume, channel, and brightness by the corresponding number of clicks on the displayed buttons (Humbleman et al. 8:13-22).

3. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Sony Corporation reference (WO 97/49057).

As to claim 16, note the Sony reference that discloses a device user interface with topology map wherein tasks performed by the devices coupled to the serial bus are also controlled and monitored by the user through the graphical use interface of the computer system” (page 4, lines 15-17). The claimed “having an identification information memory area to store identifying information, whereby said device is identified by the user” is met by the storing of connection map or a topology map in external RAM (page 14, lines 4-6) including display components as illustrated in Figures 10 and 11. The claimed “receiving data of a display component, whereby the user identifies designated equipment” is met by “[a]lternatively, the computer system will obtain the image of the device from the memory of the device itself” (page 17, lines 19-20). The claimed “storing data of said display component as said identifying information in said identification information memory area” is also met by the storing of connection map or a topology map in external RAM (page 14, lines 4-6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (US 6,603,488 B2).

As to claims 7 and 8, the claimed “wherein a display component is a program including a display element” and “wherein a control code is a program ID of a program.” Note the Humpleman et al. reference discloses a home network program guide including electronic

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television program guide (Humbleman et al. 22:56-67; 23:64). However the Humbleman et al. reference does not specifically disclose tuning television according to program id's associated with the disclosed program guide. Nevertheless, the examiner gives Official Notice that it is notoriously well known in the art of electronic program guides to allow a user to select a program listed on such a guide causing the tuner to directly tune to the channel the selected program is currently being broadcasted for the purpose of allowing a user to quickly identify a program of interest and providing a convenient means for tuning to that program that does not require a user to exit a guide and tune to such a channel manually. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Humbleman et al. home network programming guide accordingly for the above stated advantages.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Sony Corporation reference (WO 97/49057).

As to claim 17, note the Sony reference that discloses a device user interface with topology map wherein tasks performed by the devices coupled to the serial bus are also controlled and monitored by the user through the graphical user interface of the computer system" (page 4, lines 15-17). The claimed "having an identification information memory area to store display components of a plurality of kinds, whereby the device is to be identified by the user, and a flag to identify said display component of a plurality of kinds" is met by the storing of a connection or topology map in external RAM (page 14, lines 4-6) including display components as illustrated in Figures 10 and 11. The claimed receiving the flag of said display component is met by "[a]lternatively, the computer system will obtain the image of the device from the

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memory of the device itself” (page 17, lines 19-20). The claimed “storing the flag of said display component in said identifying information memory area” is also met by the storing of connection map or a topology map in external RAM (page 14, lines 4-6). However, the Sony reference is silent as to allowing a user to select the flag for identifying a device. Nevertheless, the examiner gives Official Notice that it is notoriously well known in the art to provide users graphical options for identifying objects such as in Microsoft Windows wherein a user may select an icon to represent a particular software program for the purpose of providing user customization and to allow a user to select pictorial representations that may aid in easy identification or recognition of the represented object. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Sony device images accordingly for the above stated advantages.

Claim Rejections - 35 USC § 103

7. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (US 6,603,488 B2) in further view of Troxel et al. (US 6,603,488 B2).

As to claim 30, note the Humpleman et al. reference discloses “[a]s depicted in FIG. 1, a 1394 serial bus 114 electronically connects multiple home devices on the home network 100...The 1394 serial bus 114 supports both time-multiplexed audio/video (A/V) streams and standard IP (Internet Protocol) communications” (Humpleman et al. 4:50-59) and “[i]n a presently preferred embodiment, a 1394 serial bus is used as the physical layer 164 for the data communications on the home network 100. Because of its enhanced bandwidth capabilities, the 1394 serial bus can provide a single medium for all data communications on the home network 100 (i.e. audio/video streams and command/control)” (Humpleman et al. 5:54-59). Also note,

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the Humpleman et al. reference discloses “when a DVCR outputs a video signal, the video signal is broadcast on a particular stream of the over the home network. The stream number and other information about the signal form part of the DVCR’s (outputting home device) data specification message” (Humpleman et al. 19:57-65) and “i.e. transmit a video signal, broadcasts the video signal on a particular isochronous stream” (Humpleman et al. 20:19-30) wherein the video signal comprises a TV show (Humpleman et al. 15:1-9) including audio and visual components (Humpleman et al. 5:54-60). The Humpleman et al. reference also discloses DVCR [device]capable of receiving a/v data for recording (Humpleman et al. 16:20-26) wherein receiving and transmitting elements are inherent to the devices for the purpose of communicating signals to and from the devices. The Humpleman et al. reference also discloses “devices may include a VCR and a TV in a single housing [controller]” (Humpleman et al. 5:17-19) wherein the VCR transmits synchronous data (recorded programming) (also see rejection of claim 30). However, the Humpleman et al. reference does not specifically disclose that VCR transmits data to other devices. Nevertheless, the examiner gives Official Notice that it is notoriously well known in the art for a VCR to transmit data to another device, such as another VCR, for the purpose of providing copies of recorded programming. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the DTV/VCR combination accordingly for the above stated advantages. However, the Humpleman et al. reference does not specifically disclose “a synchronous data transmitting and receiving element capable of managing transfer rate or division data, arranging data in a correct sequence, and adding or eliminating header.” Now note the Troxel et al. reference that discloses a system and method for distributing information throughout an aircraft, a local network utilizing

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IEEE 1394 buses (Troxel et al. 6:37-42). The claimed synchronous data is met by “‘data’ may include compressed or non-compressed audio, video, or audio and video in a synchronous relationship” (Troxel et al. 2:57-59). The claimed “managing transfer rate or division data” is met by “isochronous data transfers are real-time transfers which take place such that the time intervals between significant instances have the same duration at both the transmitting and receiving ends, [transfer rate]” (Troxel et al. 6:45-48). The claimed “and adding or eliminating header” is met by “[t]he IEEE 1394 standard bus architecture provides multiple channels for isochronous data transfers. A multiple bit channel number is broadcast with data [header] to ensure proper reception and allow multiple, simultaneous isochronous data transfers across the bus structure” (Troxel et al. 6:50-54). Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Humpleman et al. device and controller isochronous a/v transfer with the Troxel et al. synchronous audio/video for the purpose of providing a well known data format for transmission over a home network and to provide a/v information where the audio is synchronized with video for presentation. The examiner submits that it would have been further obvious to one of ordinary skill in the art to modify the Humpleman et al. device and controller isochronous a/v stream transfer with the Troxel et al. headers for the purpose of facilitating channel management or addressing so that devices may easily identify and access appropriate streams. Note the synchronous data transmitting and receiving element is inherent to the transmission of synchronous data isochronously to and from the disclosed devices. Also note the claimed “arranging data in a correct sequence” is met by the Humpleman et al. and Troxel et al. combination wherein a/v streams are transmitted isochronously, such data is inherently arranged

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correctly for proper receipt and display by the receiving device. The claimed “an asynchronous data transmitting and receiving element for performing transaction processing of asynchronous data” is met by the use of the IEEE 1394 serial bus for command/control of devices (Humbleman et al. 5:54-59) and obtaining device capabilities and functions (Humbleman et al. 16:20-29), wherein the IEEE 1394 serial supports both isochronous and asynchronous data transfers wherein the command/control commands are asynchronous as evidenced by Troxel et al., see column 6, lines 37-57), note the asynchronous data transmitting and receiving element is inherent to the transmission of asynchronous data to and from the disclosed devices.

As to claim 31, the claimed “a device signal processing element for receiving synchronous data from said synchronous data transmitting and receiving element and performs signal processing corresponding to said device” is met by DVCR receiving a television program for recording from a source such as DBSS (Humbleman et al. 14:64-15:9) wherein it is inherent that the signal processing be performed in order for the broadcast stream to be displayed on DTV. The claimed “a device asynchronous data processing means for processing asynchronous data received from said asynchronous data transmitting and receiving means, and transmitting the processed asynchronous data to an appropriate composing element in said device” is met by session manager sending command/control information to cause the DVCR to record the information that is being broadcast on the particular stream over the home network” (Humbleman et al. 14:64-15:2) wherein session manager is available on every browser-based home, i.e. client, device (Humbleman et al. 19:33-37).

As to claim 32, the claimed “a controller signal processing means for receiving a synchronous data from said synchronous data transmitting and receiving means” is met by DTV

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receives broadcast stream from DVCR, synchronous data (Humbleman et al. 14:49-64, also see rejection of claim 30) and “devices may include a VCR and a TV in a single housing” (Humbleman et al. 5:17-19) wherein the VCR transmits synchronous data (recorded programming) (also see rejection of claim 30). The claimed “a controller asynchronous data processing means for processing an asynchronous data received from said asynchronous data transmitting and receiving means, and transferring the processed data to an appropriate composing element in the controller” are met by that discussed in the rejections of claim 30-31 and wherein the controller obtains device capabilities and functions from devices for control by the user (Humbleman et al. 16:20-29; 14:35-40).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (571) 272-7351. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm



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